



Fig. E-1

Illustrations showing an example of a U-osteotomy to correct a biplanar deformity of a malunited subtalar fusion. **Fig. E-1A** The foot varus deformity in the frontal plane measures 30°. Note that the location of the center of rotation of angulation (CORA) is just proximal to the subtalar joint. The proximal reference line is shown in red, and the distal reference line is shown in blue. **Fig. E-1B** This example also shows 20° of equinus secondary to the malunited subtalar joint. Note that the location of the CORA is just proximal to the subtalar joint. **Fig. E-1C** Anteroposterior view showing application of external fixation. The external fixator consists of a tibial ring and a foot ring. Note that the two talar wires are bent up and attached to the tibial ring to create stirrup wires (shown in red) that link the talus to the tibia. The two opposing calcaneal olive wires provide control of the calcaneus. **Fig. E-1D** Anteroposterior view after external fixation correction. Note the correction of the varus and the increased foot height. **Fig. E-1E** Lateral view showing application of external fixation. Application is performed with a tibial ring (perpendicular to the long axis of the tibia) and a foot ring (parallel to the sole of the foot). Note that the two talar wires (stirrup wires, shown in red) are bent up and attached to the tibial ring. The talar head, two calcaneal olive wires (shown in blue), and midfoot wires are attached to the foot ring. **Fig. E-1F** Lateral view after external fixation correction. Note the reduction of the equinus deformity, the posterior translation of the foot, and the increased foot height. (Reproduced with permission of the Rubin Institute for Advanced Orthopedics, Sinai Hospital of Baltimore.)

TABLE E-1 Individual Results

Patient	Age at Surgery (yr)	Sex	Foot	Achilles Tendon Lengthening	External Fixation Type*	Fixation Time (mo)	Time Until Return to Shoe Wear (mo)	Prophylactic Tarsal Tunnel Decompression	Major Complications	Follow-up Duration (yr)	Diagnosis
1	4	F	Left	Yes	TSF	5	6	Yes	None	4	Fibular hemimelia (congenital)
2	13	F	Right	No	TSF	4	6	No	Peroneal nerve entrapment; premature consolidation; tarsal tunnel syndrome	6	Diastrophic dysplasia (congenital)
3	40	F	Right	Yes	Ilizarov	6	3	Yes	None	5	Pilon fracture (traumatic)
4	9	M	Left	No	TSF	4	3	Yes	None	5	Arthrogyrosis with postoperative deformity (developmental)
5	45	F	Left	No	TSF	4	6	Yes	None	3	Rheumatoid arthritis (developmental)
6	17	M	Right	No	TSF	5	6	Yes	None	4	Fibular hemimelia (congenital)
7	11	M	Right	Yes	TSF	4	6	Yes	None	3	Tibial hemimelia (congenital)
8	7	M	Right	No	Ilizarov	3	4	Yes	Premature consolidation	19	Tibial hemimelia (congenital)
9	12	F	Left	No	TSF	4	6	Yes	None	4	Fibular hemimelia (congenital)
10	22	F	Right	No	Ilizarov	11	6	No	Deep pin-track infection; tarsal tunnel syndrome	6	Malunited open fracture (foot/leg) (traumatic)
11	19	F	Right	Yes	TSF	6	6	Yes	None	3	Subtalar joint coalition (developmental)
12	14	M	Left	Yes	Ilizarov	5	6	Yes	None	6	Fibular hemimelia (congenital)
13	63	F	Left	Yes	TSF	7	8	Yes	None	3	Malunited ankle fracture (traumatic)
14	10	F	Right	Yes	TSF	5	6	Yes	None	5	Clubfoot with

											postoperative deformities (developmental)
15	21	F	Right	No	TSF	5	6	Yes	Deep pin-track infection	3	Clubfoot with postoperative deformities (developmental)

\*TSF = Taylor Spatial Frame.